

INTERNATIONAL SEARCH REPORT

International Application No
PCT/AT2004/000382A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H02M7/5387 H02M7/537 H02J3/38 H02M7/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02M H02J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/001210 A1 (KURANUKI MASAAKI ET AL) 3 January 2002 (2002-01-03) figures 2,6,16,18 paragraphs '0007!, '0035!, '0113!, '0127! paragraphs '0155! - '0157!, '0161!, '0185!, '0192!, '0196! - '0198!, '0228! - '0233!, '0425! -----	1-9
Y	US 2003/012038 A1 (WELCHES RICHARD S ET AL) 16 January 2003 (2003-01-16) figure 1 paragraph '0072! ----- -/-	1-9

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the International search

9 February 2005

Date of mailing of the International search report

21/02/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Zettler, K-R

INTERNATIONAL SEARCH REPORT

International Application No

PCT/AT2004/000382

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 018, no. 003 (E-1485), 6 January 1994 (1994-01-06) -& JP 05 244775 A (OKUMA MACH WORKS LTD), 21 September 1993 (1993-09-21) abstract; figures 2,3	3
A	CALAIS M ET AL: "Multilevel converters for single-phase grid connected photovoltaic systems: an overview" SOLAR ENERGY, PERGAMON PRESS, OXFORD, GB, vol. 66, no. 5, August 1999 (1999-08), pages 325-335, XP004362671 ISSN: 0038-092X figure 11a page 333, left-hand column, lines 9,10	1,8
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 02, 26 February 1999 (1999-02-26) -& JP 10 304675 A (YASKAWA ELECTRIC CORP), 13 November 1998 (1998-11-13) abstract; figures 1-4	1-9
A	EP 1 337 033 A (DAIHEN CORPORATION) 20 August 2003 (2003-08-20) abstract figures 4-6 sentences 38-50	1-9
A	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 06, 30 June 1997 (1997-06-30) -& JP 09 047082 A (TOYO ELECTRIC MFG CO LTD), 14 February 1997 (1997-02-14) abstract; figure 1	1-9

INTERNATIONAL SEARCH REPORT

International Application No
PCT/AT2004/000382

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 2002001210	A1 03-01-2002	JP 3482378 B2 JP 2001346380 A		22-12-2003 14-12-2001
US 2003012038	A1 16-01-2003	AU 4179502 A WO 0241462 A2		27-05-2002 23-05-2002
JP 05244775	A 21-09-1993	JP 3215480 B2		09-10-2001
JP 10304675	A 13-11-1998	NONE		
EP 1337033	A 20-08-2003	JP 2003311408 A CA 2420120 A1 CN 1439473 A EP 1337033 A2 US 2003156435 A1		05-11-2003 19-08-2003 03-09-2003 20-08-2003 21-08-2003
JP 09047082	A 14-02-1997	NONE		

BEST AVAILABLE COPY